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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/058,599	01/28/2002	Michael Wayne Brown	AUS920010525US1	4034
43307	7590	01/13/2005	EXAMINER	
IBM CORP (AP) C/O AMY PATTILLO P. O. BOX 161327 AUSTIN, TX 78716			ZHOU, TING	
			ART UNIT	PAPER NUMBER
			2173	

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/058,599	BROWN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ting Zhou	2173	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 November 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/18/04</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

1. The amendment filed on 24 November 2004 have been received and entered. Claims 1-18 as amended are pending in the application.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 13-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Siddiqui et al. U.S. Patent 6,097,371.

Referring to claims 13, 15 and 17, Siddiqui et al. teach a method, system and program comprising a graphical user interface comprising a plurality of displayable objects ordered in a z-order (system displaying several overlapping windows) (column 2, lines 26-36), receiving a selection of a particular displayable object from a among a plurality of displayable objects displayed within a graphical user interface in a z-order (using the input device to select one of several overlapping windows) (column 2, lines 26-28), detecting a rotation of a scroll wheel position (detecting signals produced by rotation of the roller) (column 2, lines 31-36 and column 7, lines 1-11), and rotating a relative position of the particular displayable object within the z-order according to the rotation of the scroll wheel position while maintaining a remaining selection of the plurality of displayable objects in a same relative order within the z-order,

wherein at least one of the remaining selection of the plurality of displayable objects remains in a same z-order position (using the roller to scroll through several overlapping windows; in scrolling through the plurality of overlapping windows, the z-order level of the windows are adjusted; for example, as the user scrolls from the first overlapping window to the overlapped window underneath, the relative position of the previously first overlapping window is rotated so that it is now underneath, or overlapped by the window that was previously overlapped by the first overlapping window; so the relative positions of the previous first and second overlapping windows changes but the relative z-order positions of the remaining overlapped windows are maintained, i.e. the remaining overlapped windows are still overlapped in the same z-order by the first two overlapped windows that have now changed relative positions) (column 2, lines 26-43).

Referring to claims 14, 16 and 18, Siddiqui et al. teach receiving the selection comprising at least one from a cursor input, a keyboard input, and a voice input indicating the particular displayable object (using cursor and keyboard inputs for spatial navigation of the interface) (column 2, lines 8-31 and column 12, lines 43-61 and column 23, lines 62-64).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3-5, 7-9 and 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Siddiqui et al. U.S. Patent 6,097,371 and Bates et al. U.S. Patent 5,377,317.

Referring to claims 1, 5 and 9, Siddiqui et al. teach a method, system and program comprising detecting a graphical user interface (Siddiqui et al.: column 16, lines 17-19), a rotation of a scroll wheel position (detecting signals produced by rotation of the roller) (Siddiqui et al.: column 2, lines 31-36 and column 7, lines 1-11), and rotating a z-order of a plurality of ordered displayable objects within a graphical interface according to the rotation of the scroll wheel position, wherein a z-order level of each of the plurality of ordered displayable objects is incrementally adjusted according to the rotation of the scroll wheel position (using the roller to scroll through several overlapping windows; in scrolling through the plurality of overlapping windows, the z-order level of the windows are adjusted; for example, as the user scrolls from the first overlapping window to the overlapped window underneath, the z-order of the overlapped window changes to become the most visible window, etc.) (Siddiqui et al.: column 2, lines 26-43). However, Siddiqui et al. fail to explicitly teach updating a graphically displayable table listing each of the plurality of ordered displayable objects to indicate a current position of each of the plurality of ordered displayable objects within the z-order. Bates et al. teach an interface for changing the z-order (focus) of a plurality of displayable objects (window) (Bates et al.: column 2, lines 11-34) similar to that of Siddiqui et al. In addition, Bates et al. further teach updating a graphically displayable table listing each of the plurality of ordered displayable objects to indicate a current position of each of the plurality of ordered displayable objects within the z-order (generating a graphically displayed list of the plurality of displayed windows in a descending order of activity from the top of the list to the bottom of the list of cascaded

windows, to indicate the current position of each of the windows within the z-order, or the order of cascaded windows) (Bates et al.: column 2, lines 26-29, column 3, lines 41-45, column 5, lines 6-17 and Figure 2D). It would have been obvious to one of ordinary skill in the art, having the teachings of Siddiqui et al. and Bates et al. before him at the time the invention was made, to modify the interface for rotating a z-order of a plurality of ordered displayable objects according to the rotation of a scroll wheel position of Siddiqui et al. to include the graphically displayed table listing of the plurality of displayable objects taught by Bates et al. One would have been motivated to make such a combination in order to distinctively display windows on a computer display screen to provide a more efficient way to assist users in finding partially or completely obscured windows.

Referring to claims 3, 7 and 11, Siddiqui et al. teach rotating only a particular window from among the plurality of ordered displayable objects within the z-order (for example, the user scrolls, or rotates the first displayed window to view the next, previously overlapped window) (column 2, lines 26-43).

Referring to claims 4, 8 and 12, Siddiqui et al. teach adjusting the z-order of the plurality of ordered displayable objects according to a criteria for the z-order (rotating through the overlapped windows after receiving a signal from the roller and according to a predetermined amount of rotation) (column 2, lines 35-43).

4. Claims 2, 6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siddiqui et al. U.S. Patent 6,097,371 and Bates et al. U.S. Patent 5,377,317, as applied to claims 1, 5 and 9 above, and Hijikata U.S. Patent 5,898,433.

Referring to claims 2, 6 and 10, Siddiqui et al. and Bates et al. teach all of the limitations as applied to claims 1, 5 and 9 above. Specifically, Siddiqui et al. teach displaying and adjusting the z-order of a plurality of ordered displayable objects (displaying and scrolling through a plurality of overlapped windows) (Siddiqui et al.: column 2, lines 26-43). However, Siddiqui et al. and Bates et al. fail to explicitly teach adjusting a transparency of a selection of the plurality of ordered displayable objects positioned at a particular level within the z-order. Hijikata teaches an interface for displaying windows in a particular z-order (Hijikata: column 3, lines 54-61) similar to that of Siddiqui et al. and Bates et al. In addition, Hijikata further teaches adjusting a transparency of a selection of the plurality of ordered displayable objects positioned at a particular level within the z-order (changing the display states, or transparency levels of windows according to the depth quantities, or z-order) (Hijikata: column 3, lines 54-61, column 4, lines 32-41 and column 5, lines 16-26). It would have been obvious to one of ordinary skill in the art, having the teachings of Siddiqui et al., Bates et al. and Hijikata before him at the time the invention was made, to modify the interface for displaying windows in a z-order of Siddiqui et al. and Bates et al. to include adjusting the transparencies of windows taught by Hijikata. One would have been motivated to make such a combination to reduce the possibility of causing the user to get confused by the window front/back relationship, in order to effectively arrange the display screen to present a three-dimensional array of windows in an easy-to-understand manner; furthermore, this combination allows the user to perceive intuitively the boundary areas of the windows or positional relationships therebetween and can improve the ease of use of the window system.

*Response to Arguments*

5. Applicant's arguments with respect to claims 1- 3, 5-7, and 9-11 have been considered but are moot in view of the new ground(s) of rejection.

6. Applicant's arguments filed 24 November 2004, with respect to claims 4, 8 and 12-18 have been fully considered but they are not persuasive.

With regards to claims 4, 8 and 12, the applicant asserts that Siddiqui does not teach further adjusting the z-order according to criteria other than responding to the rotation of the scroll wheel position. The examiner respectfully disagrees. Siddiqui teaches rotating the z-order of the displayed plys when the user selects the ply and rotates the roller to scroll through the ply (column 3, lines 26-43); in other words, the first criteria for rotating the z-order of the displayed plys is that there must be a detection of user intent to scroll through the displayed ply via user selection of a ply and user selection of the roller. In addition, Siddiqui teaches further adjusting the z-order level of the plurality of ordered displayed plys according to the further criteria of the user's selected amount of rotation matching the predetermined amount of rotation of the roller associated with each ply; in other words, the z-order of the plys are further rotated via scrolling through and selecting a visually obscured ply with the predetermined amount of rotation that corresponds to the user's selected amount of rotation (column 3, lines 26-43). Therefore, the z-order of the plys are rotated first according to the criteria of user selection of a ply and user initiation of the roller, and the further criteria of matching the predetermined amount of rotation to the user's selected amount of rotation in order to display a selected ply.



With regards to claims 13-17, the applicant asserts that Siddiqui only describes rotating all the objects in a z-order, where each object maintains a same relative position within the z-order in relation to the other objects, and all objects rotate, but Siddiqui does not teach rotating a particular object, where the relative position of the object changes, but the remaining objects stay in the same relative order within the z-order. The examiner respectfully disagrees. Siddiqui teaches allowing the user to scroll through and select one of several overlapping plys, with each of the plys corresponding to a predetermined amount of rotation (column 2, lines 26-43); in other words, each predetermined amount of rotation scrolls through a single ply in the z-order of overlapping plys. As an example, if there are five overlapping plys, ABCDE, and each one scroll of the roller corresponds to one ply, when the user scrolls the roller once, the previously first overlapping ply A, switches position with the previously overlapped ply, B, so that the new z-order of the plys would be BACDE; however, the relative position of the remaining plys CDE is maintained as before and the plys, C, D and E all remain in the same z-order position of occupying the third, fourth and fifth spots respectively. Therefore, when the relative position of one of the plys changes, or rotates, the relative positions of the rest of the plys in the z-order remain the same, so that at least one of the remaining objects remains in the same z-order position.

7. Therefore, it can be seen that Siddiqui anticipates the subject limitations.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

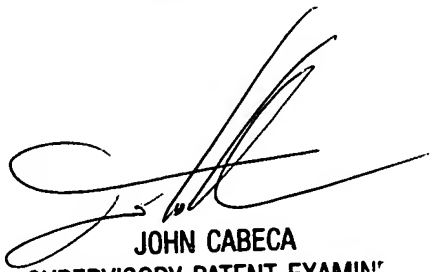
#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ting Zhou whose telephone number is (571) 272-4058. The examiner can normally be reached on Monday - Friday 8:30 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached at (571) 272-4048. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-4058.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

6 January 2005



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